ballondor

April 12, 2022

The Ballon d'Or is an annual football prize presented by France Football. The award, voted for by football journalists, is given to the male player who was deemed to have played the best football over the previous 12 months.

Import all necessary libraries

[44]:
```
import requests
from bs4 import BeautifulSoup
import pandas as pd
import numpy as np
import plotly.express as px
import seaborn as sns
import matplotlib.pyplot as plt
from wordcloud import WordCloud
from IPython.display import Image
```

[15]:
```
# pip install WordCloud
```

0.0.1 Read the csv file in new dataframe

[16]:
```
df =pd.read_csv('BallonDorOutput.csv', encoding='utf8')
```

0.0.2 Data Exploration!

[17]:
```
df.head()
```

[17]:

	year	player	Nationality	club
0	2021	Lionel Messi	Argentina	Paris Saint-Germain F.C.
1	2019	Lionel Messi	Argentina	Barcelona
2	2018	Luka Modric	Croatia	Real Madrid
3	2017	Cristiano Ronaldo	Portugal	Real Madrid
4	2016	Cristiano Ronaldo	Portugal	Real Madrid

[18]:
```
df.tail()
```

[18]:

	year	player	Nationality	club
60	1960	Luis Suárez	Spain	Barcelona
61	1959	Alfredo Di Stéfano	Spain	Real Madrid

```
 62  1958        Raymond Kopa      France  Real Madrid
 63  1957  Alfredo Di Stéfano       Spain  Real Madrid
 64  1956    Stanley Matthews     England    Blackpool
```

[19]:
```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 65 entries, 0 to 64
Data columns (total 4 columns):
 #   Column       Non-Null Count  Dtype 
---  ------       --------------  ----- 
 0   year         65 non-null     int64 
 1   player       65 non-null     object
 2   Nationality  65 non-null     object
 3   club         65 non-null     object
dtypes: int64(1), object(3)
memory usage: 2.2+ KB
```

[20]:
```
df.columns
```

[20]:
```
Index(['year', 'player', 'Nationality', 'club'], dtype='object')
```

[21]:
```
df.isna().sum()
```

[21]:
```
year           0
player         0
Nationality    0
club           0
dtype: int64
```

Which club's players won the most?

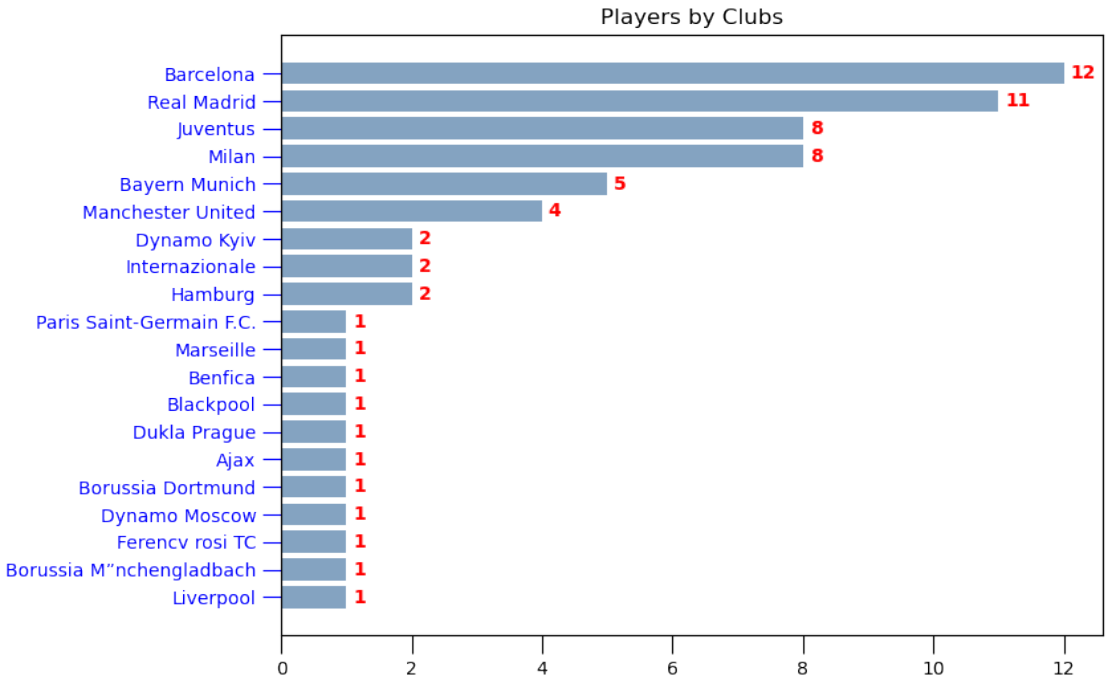
[22]:
```
clubs=df.club.value_counts().index
no_players=df.club.value_counts().values

plt.figure(figsize=(8,6), dpi=100)
plt.title("Players by Clubs")
plt.barh(y=clubs, width=no_players, align='center',color=(0.2, 0.4, 0.6, 0.6))

#Set tick colors:
plt.gca().invert_yaxis()
plt.tick_params(axis='x', colors='black', size=10)
plt.tick_params(axis='y', colors='blue', size=10)

# display the value of the bar on each bar
for i, v in enumerate(no_players):
    plt.text(v+0.1, i+0.2, str(v), color='r', fontweight='bold')
```

```
plt.show()
```



Which country's players won the most?

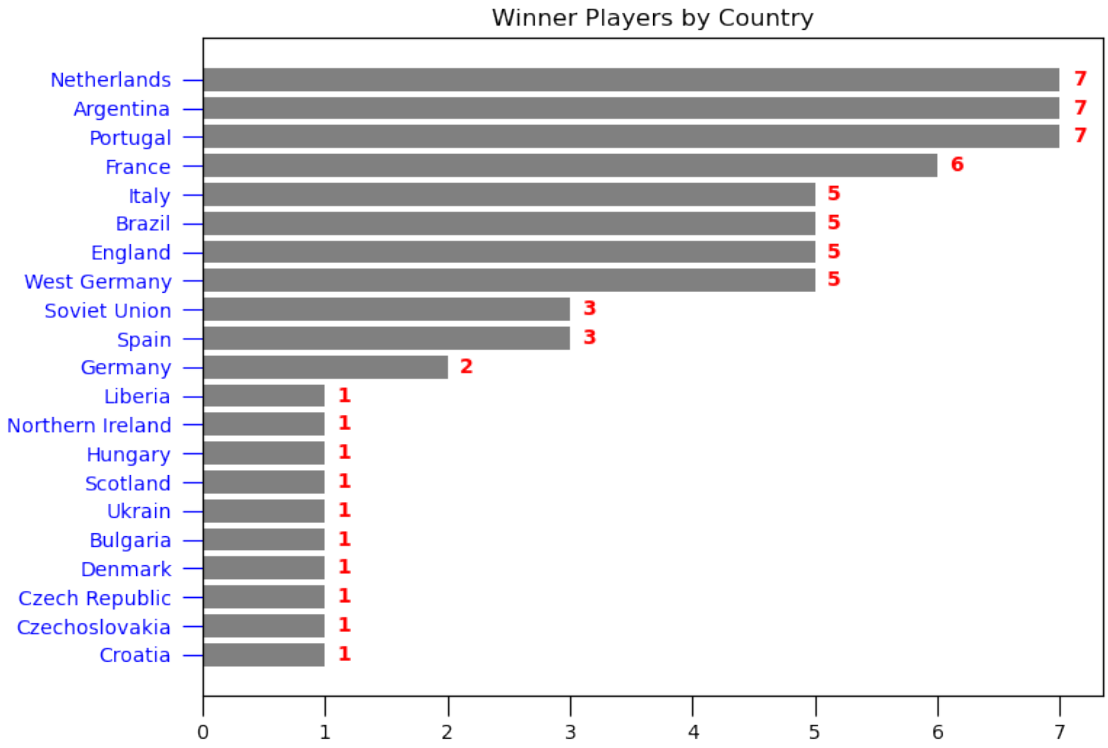
[23]:
```
countries =df.Nationality.value_counts().index
no_players=df.Nationality.value_counts().values

plt.figure(figsize=(8,6),dpi=100)
plt.title("Winner Players by Country")
plt.barh(y=countries, width=no_players, align='center',color="grey",)

#Set tick colors:
plt.gca().invert_yaxis() # labels read top-to-bottom
plt.tick_params(axis='x', colors='black',size=10)
plt.tick_params(axis='y', colors='blue', pad=5,size=10,)


# display the value of the bar on each bar
for i, v in enumerate(no_players):
    plt.text(v + 0.1, i + 0.2, str(v), color='r', fontweight='bold')

plt.show()
```



0.0.3 Players who have won the FIFA Ballon d'Or more than once between 1956 and 2021

[29]:
```
won_more_than_once = df.player.value_counts()
import os

if not os.path.exists("images"):
    os.mkdir("images")
```

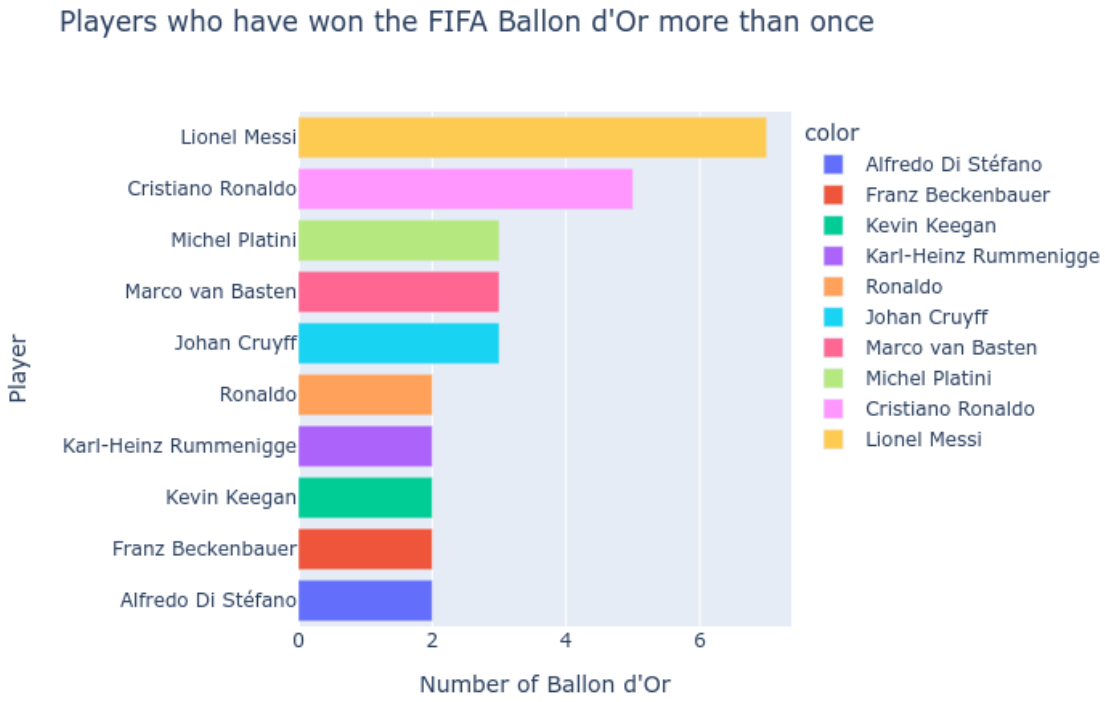
[25]:
```
x=won_more_than_once[:10].values
y=won_more_than_once[:10].index
```

[43]:
```
h_bar = px.bar(x=x[::-1],
               y=y[::-1],
               orientation='h',
               color=y[::-1],
               title="Players who have won the FIFA Ballon d'Or more than once␣
 ↪")

h_bar.update_layout(xaxis_title="Number of Ballon d'Or",
                    yaxis_title='Player',
                    coloraxis_showscale=False)
```

```
# h_bar.show()
h_bar.write_image("images/fig1.png")
Image(filename="images/fig1.png")
```

[43]:



0.0.4 Create the wordcloud

[46]:

```
# Create a list of word
players_name = list(df.player)
str1 = ' '.join(players_name)

# Create the wordcloud object
wordcloud = WordCloud(width=1480,
                      height=680,
                      margin=10,).generate(str1)

plt.figure(figsize=(8,6),dpi=100)

# Display the generated image:
plt.imshow(wordcloud, interpolation='bilinear')
plt.axis("off")
```

```
plt.margins(x=0, y=0)
plt.show()
```

[ ]: